



INTRODUCTORY LECTURE

AT THE

Opening of the Fifty-Fifth Session of the
Medical Faculty of McGill University.

OCTOBER 3, 1887.

BY

SIR JAMES A. GRANT, M.D., F.R.C.P., LOND., &C.,
CONSULTING PHYSICIAN, GENERAL AND GENERAL PROTESTANT HOSPITALS, OTTAWA CITY.

Reprinted from the Canada Medical & Surgical Journal, November, 1887.

MONTREAL:
GAZETTE PRINTING COMPANY.

1887.

INTRODUCTORY LECTURE
AT THE OPENING OF THE FIFTY-FIFTH SESSION OF THE MEDICAL
FACULTY OF MCGILL UNIVERSITY,
OCTOBER 3, 1887.

BY SIR JAMES ALEXANDER GRANT, M.D., F.R.C.P., LOND., &c.,
Consulting Physician, General and General Protestant Hospitals, Ottawa City.

GENTLEMEN:—It is certainly a cheerful sign of the times, and a most encouraging one, to observe the deep interest taken in the medical department of this college. The position of responsibility and trust in which I am placed here to-day, in my Alma Mater, is an exceedingly pleasing one, and more particularly so, as it brings with it the very gratifying duty of an address. During the years which have passed since I left the halls of this university, many and important changes have taken place. Holmes and McCulloch, Hall and Bruneau, Fraser and Scott, Sutherland and Campbell, have all passed away, and in doing so, left a noble record of their works in the education, at this fountain of science, of many who at present are guiding and directing the best interests of our noble profession in this country. True, since even their time, medicine has undergone many and important changes which require the fullest possible consideration. The recent discoveries of Pasteur and their practical application mark the present as an era of more than ordinary interest in scientific research. In almost every department of the profession of medicine new discoveries are coming to light, and such as cannot fail to prove of immense benefit to suffering humanity. As Grant Allen expresses it, "ours has been an age

of firm grasp and wide vision." In the pride of our hearts we forget for the most part how very young science still is. Outside of our profession, in the vast domain of collateral sciences, we also trace strides alike indicative of the march of intellectual progress. Astronomy advanced furthest when our age was still young. Geology had then only just began to take shape and form as a science, surrounded by absurd theories and inaccurate data. In this department the name of Logan is closely allied with a period of great advancement, as far as Canadian geology is concerned. He was a warm friend and supporter of McGill. In this same branch of science, few men have accomplished more than the present respected principal of this university, whose name is associated with many of the greatest discoveries made during the past quarter of a century in geology and palæontology. Among the separate sciences, many remarkable advances have been made which have formed the very basis of the principles and the education of those now entering upon the study of the medical profession. Of these separate departments of science, few have been marked with greater indications of progress than electricity. The telephone, the microphone, and the electric light have aroused an interest widespread in its character, and these, in addition to the telegraph and Atlantic cable, have given an impetus and force to thought quite sufficient to identify and stamp the present as a time remarkable, beyond computation in the progress of intellectual development.

Present on this occasion, it is gratifying to observe the large number about to enter upon the study of medicine, and it must be a great source of encouragement to be aware of the fact that you are about to be educated, as Sir George McLeod recently termed it, "under the new dispensation." Now-a-days the scientific physician is more disposed to observe closely the operations of nature and to *trust less* to art in the cure of disease. The skilful co-operation of these forces gives an impress to progress in medical science, hence the advantage to be gained in an institution like McGill, where every opportunity at home and abroad is embraced in the way of scientific research to assist the student in obtaining such a knowledge of the various branches

of the profession as will enable him to discharge with credit the responsibilities devolving upon him when in the ranks of professional life. Such assemblages as the present are not without their value. The presence of the teachers might be accepted as an earnest of their desire to fulfill the varied duties they have undertaken to perform, and that while they devoted themselves to their pupils' interest, they expected in return the most lively co-operation possible during the prosecution of their studies. At present in this audience are two classes of students—those who are now commencing or still prosecuting studies, and those who are about to turn the instruction received to practical account. The chief and the important object in view in attending medical lectures is to gain information and store it up for future use in the varied paths of medical life. This is a critical time in your fortunes. Knowledge is not only power, but it is pleasure; such was the opinion of Bacon, the prince of all philosophers. Great men have been amongst you, and it is your happiness that some of them are still with you. It is not an uncommon thing for local reputations to have no national recognition. It is not so with the head of this institution, who is honored and respected amongst his fellow-men, and has recently filled one of the first scientific positions in the world as President of the British Association for the Advancement of Science. These are facts, gratifying in the highest sense, inasmuch as such places filled by native-born Canadians is an evidence of the progress of our age and in this not the least uninteresting of the colonies of the British Empire.

Let me here remark that in my humble opinion the very first step for a student of medicine is *the acquirement* of a good general education prior to entering upon the study of the profession. This has been found a difficulty in the past, but through varied educational facilities now at the disposal of the youths of our country, a good practical education, embracing classics and literature, can be acquired. It is to be hoped the day is not far distant when those entering on the study of medicine will be required to take the degree of B.A. 'Tis true the professions are becoming crowded, and, consequently, those who wish to

attain eminence must become most proficient in all that fits a man for the highest stations in life. In order to command the respect of society and maintain the dignity of the profession, the medical man must know more than the mere practical duties of his calling. He ought to be the equal in point of general education of his associates in society. Thus he is enabled to uphold the dignity of his profession, which in time, by the adoption of a lower standard of education, would reduce one of the noblest callings of life to a level not even dreamt of in the remote days of Hippocrates. The life of the medical man is that of an every-day student. The term of study and observation is being constantly exemplified. The student in college will also be the student in practice. The foundation now placed will carry its appropriate superstructure. Human knowledge is never stationary: its very essence is progress. Theories accepted to-day may in a short time be disproved by additional scientific enquiry. Every day's experience will give you new and varied facts, and you must not rest satisfied with any fancied idea of perfection. Increase your knowledge and add to it daily, and even then times will arise when the difficulty of defining the varied manifestations of disease will be self-evident.

To the junior student let me say, be careful as to your habits of life; prudent as to diet; retire to rest at regular hours; take occasional physical exercise; retain the proper balance of mind and body. The duties of after life require a sound and vigorous constitution in order to enable the medical man to grapple with the varied surroundings of life. Under such circumstances, it is most essential to see carefully to the requirements necessary to promote a healthy condition, mental and physical. The "*mens sana in corpore sano.*" How frequently, by neglect in these particulars, some of our brightest students deprive themselves and the country of their valued services. Think for yourselves and much trouble will be overcome. The habit of thought and reflection is a great factor in the success of life. The time was when students were not thus credited, but now-a-days the contrary is the case. While you carry bare facts in your memories, think carefully over the results likely to

flow from an accumulation of such information. Medical knowledge is a sacred trust placed in the hands of every student for the benefit of mankind. In proportion to the care bestowed upon the elementary branches of medicine, so will you be able to master, with a greater degree of accuracy, the final subjects which complete your course of academic study. A want of due care and attention at first is very difficult to make up for afterwards. Let no student deceive himself in this particular. There should be an earnestness of purpose, thus in many respects defects in early education and even lack of genius would be overcome. As Socrates stated over 2000 years ago, "The best man and most beloved of the gods is he who, as a husbandman, performs all the duties of husbandry; as a surgeon, those of the medical art, in political life, have duties towards the commonwealth; but the man who does nothing well is neither useful nor agreeable to the gods," or as Sir John Macdonald has expressed it, "his usefulness is gone."

"Whatever thy hand findeth to do, do it with all thy might; work while it is day: the night cometh when no man can work."

What was it made Xavier and Schwartz as missionaries, Bunyan and Wesley as teachers, in their particular lines of thought? What was it rendered so dear the names of Newton and Milton, of Arkwright and Stevenson? What was it that has made us love and cherish the names of Harvey and Hunter, of Syme and Simpson, of Trousseau and Lænnec? It may be summed up in the few but expressive words, *earnestness of purpose*. Be vigilant, then—be careful—be prudent; do not take too much credit to yourselves, for you are only the instruments in the hands of a wise Providence for the accomplishment of a good purpose. It should be your ambition to imitate your great and renowned predecessors, men who shed light and lustre upon their callings in life, and by their earnestness and simplicity of purpose endeared themselves to all with whom they came in contact. The rewards which the medical profession holds out are not those of high place or great emolument. With care and prudence a moderate competence is certain, and you will have the society of warm and attached friends, who will sympa-

thiſe with you in your troubles and give you a helping hand in the time of need. You will come in contact with all claſſes of ſociety, and let your earneſt endeavor be to perform the honorable and reſponsible duty entrusted to your charge in ſuch a manner as to reflect credit on yourſelf, the profeſſion, and your "Alma Mater." This programme is well in its way, ſays the average ſtudent, but what is the moſt certain method of ſecuring ſucceſs in after life? Having maſtered in a meaſure, and as far as poſſible in the ſpecified time, the primary branches of ſtudy, the next moſt important ſtep is towards hoſpital and clinical work. In this direction you will lay the foundation which, if carefully followed out, is moſt likely to aſſiſt you when left to yourſelves. See carefully, then, to the caſes brought under your obſervation. Take notes of the various points dwelt upon in the clinics. Let no fact, however trifling, eſcape you. Thus by degrees you will acquire *accuracy* in deſcribing the life hiſtory of each caſe, and with ſatisfaction be able to form an opinion as to the future proſpect of your patient. Familiarize yourſelves with the principles of therapeutics. Be accurate in compounding medicines; obſerve carefully their action on the ſystem, and embrace every opportunity of writing preſcriptions ſo that chemiſts in compounding may make no error on that account. After writing a preſcription, read it over again carefully, and be ſpecific in directions as to its uſe. The ſummer courſes in medicine at the various hoſpitals is certainly a ſtep in the right direction, as, in my opinion, medical training cannot be too clinical in its character. Sir Andrew Clarke made his reputation by examining every caſe thoroughly, no matter how trivial, and if medicine was not neceſſary, a diet liſt was preſcribed, which could not fail to attract the patient's attention, to the vaſt importance of not violating the laws of nature. This eminent authority ſcans the very "*warp and woof*" of human ſtructure, and defines almoſt at a glance the *weakened fibre*.

In the miſt of clinical work, no line of thought is more important than the physiognomy of diſeaſe. To the medical man it is a conſtant field of obſervation. Years of labor and application are neceſſary to develop this power, and in even a mode-

rate degree it becomes a great factor towards success in professional life. Syme and Simpson possessed it in an eminent degree, and, in fact, this form of education, which with some might almost be considered as *intuitive* power, has contributed greatly to the reputation of many illustrious members of the medical profession. The physiognomical diagnosis of morbid constitutional states has been ably discussed by Laycock of Edinburgh. It is this form of knowledge which comes to the surface, and often very remarkably, with trained nurses. External indications cannot always be relied upon, and still such are of vast importance, as pointers for future observation. The staining of jaundice, the tints of hectic, the eruptions of exanthematous fevers, the suppressed breathing of pleurisy, the orthopnoea of cardiac diseases, the pigmentation of Addison's disease, and numerous other external manifestations of internal systemic trouble are all important as factors in arriving at either a diagnosis or prognosis of the malady. The experienced eye only comes about gradually, and well directed study is necessary in order to be even moderately proficient in reading the outward developments resulting from defective systemic action and reaction. The young physician who possesses even in a moderate measure this faculty has a lever of success in his hands far superior to any purchased practice. To our young friends I would say, study diligently the physiognomy of disease, as much valuable information will result therefrom.

To a few points of special interest I desire now to call your attention. Wherever you settle in practice, observe carefully that particular locality, its physical peculiarities and the bearings of such with reference to the development of disease. Thus you will in time accumulate much valuable information. When called to visit a zymotic case, enquire closely into the question of plumbing, drainage, water and food supply. Thus the causes of such diseases as scarlet fever, typhoid fever, diphtheria, etc., may be ascertained, and much practical good accomplished towards arresting their spread. The neglect of sanitary science in many of our centres of trade and commerce is doubtless a prolific source of the remarkable mortality recorded in our

present mortuary statistics. Action in this direction marks the prudence of the medical man, gives confidence to the public as to his professional ability, and advances the interest of the state by the proper regulation of such defects as are found to exist in carrying out the principles now being formulated by Boards of Health in various parts of Canada. In this direction the present *Canada Health Journal* is accomplishing a good work, and I trust the day is not far distant when the Dominion Government will see the necessity of establishing a Bureau of Health and Statistics such as that now approved at Washington. Thus a progressive measure would be inaugurated, and one which could not fail to save annually thousands of valuable lives. We yearly expend considerable sums of money in bringing emigration into the country, but what could possibly be more noble and philanthropic than to stay, by active measures, the present marked emigration out of the country by infantile mortality. This is a question which requires the closest attention, and let the proper authorities see to it.

There is one other point to which I wish to allude briefly, as much good can be accomplished in that direction. At present the subject of early mental training is occupying considerable attention on both sides of the Atlantic. Wherever you locate, there will most likely be some form of educational institution, and the little inmates may require your professional care and guidance. At present, the multiplicity of subjects crowded into a short period of time, and expected to be carried in the cranial cavity, are more than sufficient to make the heads of families pause before subjecting their children to this form of over-brain taxation. This subject cannot be too carefully thought over. No part of the human body endures less strain than the tiny brain—soft, pliant and pulpy, yet sparkling with evidences of intellectual activity. The period of youth is the child's sunshine, and frequently the very exhibition of natural gifts stimulates the parent to subject the child to a course of over mental strain, such as may render dull in after life those active germs of mental growth, and even thus sap the power of physical organization as well. Our prize animals are not used as dray horses until

properly developed. Time is necessary, also, for the proper mental and physical growth of the rising generation. The expansion of brain tissue, above all, should not be overtaxed by excessive burdens in the way of brain cramming. No two faces in the whole human family are precisely alike, and the same diversity exists as to brain power and brain capacity. Let us be natural, and exactly what a kind Providence made us. This age is one surrounded by great evidences of progress in science, in literature and in art, and the great masters in any one of these departments of thought were not overtaxed in the period of youth by mental strain. The men to-day who guide and direct our Dominion have not had the common-sense educated out of them. Well directed mental training is certainly necessary, and to be of practical utility in after life, too much care and attention cannot be bestowed on the education of the young, who will in time be called upon to occupy important positions in the varied paths of life's duty. To our young medical men we look for careful observation in this direction, in which much useful and practical work, in the way of reforms, may be brought about. Our Canadian children compare favorably with those in any other part of the world, as far as intellectual activity is concerned, and our aim and object should be to preserve the gifts of nature, glowing with more than ordinary lustre around the cerebral thrones of a rising generation. The more closely this whole subject is thought over, the more attention will it attract. The addition of a work-room to each public school, where children might employ even half a day in each week in making various articles in wood used in every-day life, would greatly encourage them in study, turn their practical genius to account, and, in a new country like Canada, with a great North-West, render them better able to grapple with the varied vicissitudes of life. Mental and physical training thus combined would give force and vigor to the system generally, and draw out the special aptitude of many for particular lines of duty. There is no more useless member of society than he who knows everything and can do nothing. At the present time it is necessary to be prepared for any emergency, and education should be so directed as to achieve

the most practical results, while at the same time the varied advantages of our educational institutions are being utilized compatible with the principles of health.

To our young men I would say, be interested yourselves, and in all such matters you will interest others. When you have anything important, the public will not fail to give you attention. Speak with all your heart, and ears will gladly listen to your observations. The surprise power will generally attract some attention. Keep on with common-place affairs, and no particular interest is aroused, but, as Spurgeon advised, "*give the very cradle a jerk*" in which the public mind slumbers, and every nerve is strung to ascertain what next. It is self-interest which thus quickens and sharpens our senses and gives a lively turn to passing events.

In conclusion, I would say, let our young medical men protect their fellow-practitioners, and avoid quarrels and petty jealousies. Let us not be called "the jealous members of the conjectural art." We have a noble profession, with the prospect that by industry, honesty and perseverance, sooner or later, worldly success will follow, and a noble-minded physician is one who, in all he does, feels himself to be the student of God's works.

This jubilee year of Her Majesty has added in a remarkable degree to the future educational prospects of the Medical Faculty of McGill University. The princely gift of Sir George Stephen and Sir Donald A. Smith to found a new hospital in this city for all creeds and all nationalities marks in an undoubted manner the progressive development of our country and the liberality of our people. Their names will be handed down to posterity as noble benefactors of their day and generation.

Before resuming my seat, I desire to thank in an especial manner the Dean and other members of the Medical Faculty for the marked consideration shown in affording me this opportunity of tendering a few words of advice to our young men, who are no doubt proud of the distinction of being medical students and alumni of this University.

l
-

d
e
l.
r
e
r
y
y
h
n

ct
s.
al
oy
ly
in

le
ty
en
for
er
of
as

ial
lty
or-
en,
cal